



FORM PTO-1449  <u>INFORMATION DISCLOSURE STATEMENT</u>		ATTY. DOCKET NO. 0623.1000000	APPLICATION NO. 09/756,283
		APPLICANT Chernajovsky et al.	
		FILING DATE January 9, 2001	GROUP 1614

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
JK	AA1	5,697,901	12/16/1997	Eriksson	604	46	05/19/1995
JK	AB1	5,801,231	09/01/1998	Derynck et al.	536	23.1	05/30/1995
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## FOREIGN PATENT DOCUMENTS

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	AL						Yes No
	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

JK	AR	1	Baugh, M.D., et al., "Matrix Metalloproteinase Levels Are Elevated in Inflammatory Bowel Disease," <i>Gastroenterology</i> 117:814-822, American Gastroenterological Association (1999)
	AS	1	Brunner, A.M., et al., "Site-directed Mutagenesis of Cysteine Residues in the Pro Region of the Transforming Growth Factor $\beta$ 1 Precursor," <i>J. Biol. Chem.</i> 264:13660-13664, The American Society for Biochemistry and Molecular Biology, Inc. (1989)
	AT	1	Brunner, A.M., et al., "Site-Directed Mutagenesis of Glycosylation Sites in the Transforming Growth Factor- $\beta$ 1 (TGF $\beta$ 1) and TGF $\beta$ 2 (414) Precursors and of Cysteine Residues within Mature TGF $\beta$ 1: Effects on Secretion and Bioactivity," <i>Mol. Endocrinol.</i> 6:1691-1700, The Endocrine Society (1992)

EXAMINER	JK	DATE CONSIDERED
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## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	2	Carroll, M.C., "The Role of Complement and Complement Receptors in Induction and Regulation of Immunity," <i>Annu. Rev. Immunol.</i> 16:545-568, Annual Reviews Inc. (1998)
	AS	2	Chernajovsky, Y., et al., "Efficient Constitutive Production of Human Fibroblast Interferon by Hamster Cells Transformed with the IFN- $\beta_1$ Gene Fused to An SV40 Early Promoter," <i>DNA</i> 3:297-308, Mary Ann Liebert, Inc. (1984)
	AT	2	Chernajovsky, Y., et al., "Pathogenic lymphoid cells engineered to express TGF $\beta_1$ ameliorate disease in a collagen-induced arthritis model," <i>Gene Ther.</i> 4:553-559, Stockton Press (1997)

EXAMINER		DATE CONSIDERED
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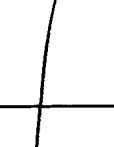
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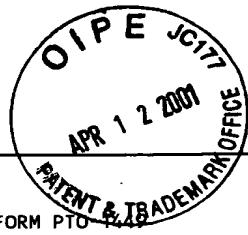
**OTHER (Including Author, Title, Date, Pertinent Pages, etc.)**

	AR	3	Coombs, G.H. and Mottram, J.C., "Parasite proteinases and amino acid metabolism: possibilities for chemotherapeutic exploitation," <i>Parasitology</i> 114:S61-S80, Cambridge University Press (1997)
	AS	3	Crawford, S.E., et al., "Thrombospondin-1 Is a Major Activator of TGF-β1 In Vivo," <i>Cell</i> 93:1159-1170, Cell Press (1998)
	AT	3	DeClerck, Y.A., et al., "Inhibition of Invasion and Metastasis in Cells Transfected with an Inhibitor of Metalloproteinases," <i>Cancer Res.</i> 52:701-708, The American Association for Cancer Research (1992)

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



Page 4 of 24

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OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	4	de Martin, R., et al., "Complementary DNA for human glioblastoma-derived T cell suppressor factor, a novel member of the transforming growth factor-β gene family," EMBO J. 6:3673-3677, IRL Press Ltd. (1987)
	AS	4	Derynck, R., et al., "Human transforming growth factor-β complementary DNA sequence and expression in normal and transformed cells," Nature 316:701-705, Macmillan Publishers Ltd. (1985)
	AT	4	Derynck, R., et al., "A new type of transforming growth factor-β, TGF-β3," EMBO J. 7:3737-3743, IRL Press Ltd. (1988)

EXAMINER		DATE CONSIDERED
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Page 5 of 24

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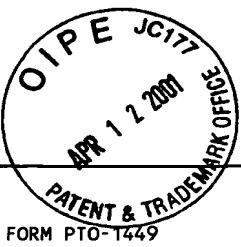
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AP							Yes No

**OTHER (Including Author, Title, Date, Pertinent Pages, etc.)**

<i>RJ</i>	AR	5	Derynck, R., "TGF- $\beta$ -receptor-mediated signaling," <i>Trends in Biochem. Sci.</i> 19:548-553, Elsevier Science Ltd. (1994)
	AS	5	Dreja, H., et al., "Soluble Complement Receptor 1 (CD35) Delivered by Retrovirally Infected Syngeneic Cells or by Naked DNA Injection Prevents the Progression of Collagen-Induced Arthritis," <i>Arthritis &amp; Rheumatism</i> 43:1698-1709, American College of Rheumatology (August 2000)
	AT	5	Eklöv, S., et al., "Lack of the Latent Transforming Growth Factor $\beta$ Binding Protein in Malignant, but not Benign Prostatic Tissue," <i>Cancer Res.</i> 53:3193-3197, American Association for Cancer Research (1993)

EXAMINER	<i>M.L.</i>	DATE CONSIDERED <i>1/16/01</i>
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.		



ATTY. DOCKET NO.  
0623.1000000

APPLICATION NO.  
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INFORMATION DISCLOSURE STATEMENT

Page 6 of 24

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AN						Yes No
AO						Yes No
AP						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

<i>[Signature]</i>	AR	6	Gibson, M.A., "Bovine Latent Transforming Growth Factor $\beta$ 1-Binding Protein 2: Molecular Cloning, Identification of Tissue Isoforms, and Immunolocalization to Elastin-Associated Microfibrils," <i>Molec. Cell. Biol.</i> 15:6932-6942, American Society for Microbiology (1995)
<i>[Signature]</i>	AS	6	Goldman, M.H., et al., "Monitoring proteolysis of recombinant human interferon- $\gamma$ during batch culture of Chinese hamster ovary cells," <i>Cytotechnol.</i> 23:103-111, Kluwer Academic Publishers (1997)
<i>[Signature]</i>	AT	6	Gordon, E.M., et al., "Capture and Expansion of Bone Marrow-Derived Mesenchymal Progenitor Cells with a Transforming Growth Factor- $\beta$ 1 - von Willebrand's Factor fusion Protein for Retrovirus-Mediated Delivery of Coagulation Factor IX," <i>Hum. Gene Ther.</i> 8:1385-1394, Mary Ann Liebert, Inc. (1997)

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Page 1 of 24

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OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	Z	Han, Z., et al., "AP-1 and NF-κB Regulation in Rheumatoid Arthritis and Murine Collagen-Induced Arthritis," <i>Autoimmunity</i> 28:197-208, Harwood Academic Publishers (1998)
	AS	Z	Hanks, S.K., "Amino acid sequence of the BSC-1 cell growth inhibitor (polyargin) deduced from the nucleotide sequence of the cDNA," <i>Proc. Natl. Acad. Sci. USA</i> 85:79-82, National Academy of Sciences of the USA (1988)
	AT	Z	Iwakura, Y., et al., "Purification of Mouse L Cell Interferon," <i>J. Biol. Chem.</i> 253:5074-5079, The American Society of Biological Chemists, Inc. (1978)

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DATE CONSIDERED

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Page 8 of 24

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AP						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	8	Jakowlew, S.B., et al., "Complementary Deoxyribonucleic Acid Cloning of a Messenger Ribonucleic Acid Encoding Transforming Growth Factor $\beta$ 4 from Chicken Embryo Chondrocytes," <i>Molec. Endocrinol.</i> 2:1186-1195, The Endocrine Society (1988)
	AS	8	Janssens, K., et al., "Mutations in the gene encoding the latency-associated peptide of TGF- $\beta$ 1 cause Camurati-Engelmann disease," <i>Nature Genetics</i> 26:273-275, Macmillan Magazines Ltd. (November 2000)
	AT	8	Kanzaki, T., et al., "TGF- $\beta$ 1 Binding Protein: A component of the Large Latent Complex of TGF- $\beta$ 1 with Multiple Repeat Sequences," <i>Cell</i> 61:1051-1061, Cell Press (1990)

EXAMINER	DATE CONSIDERED
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Page 9 of 24

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	AL						Yes No
	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

AR	9	Khalil, N., "TGF-β: from latent to active," <i>Microbes and Infection</i> 1:1255-1263, Elsevier (1999)
AS	9	Kojima, S., et al., "Requirement for Transglutaminase in the Activation of Latent Transforming Growth Factor-β in Bovine Endothelial Cells," <i>J. Cell Biol.</i> 121:439-448, The Rockefeller University Press (1993)
AT	9	Kondaiah, P., et al., "Identification of a Novel Transforming Growth Factor-β (TGF-β5) mRNA in <i>Xenopus laevis</i> ," <i>J. Biol. Chem.</i> 265:1089-1093, The American Society for Biochemistry and Molecular Biology, Inc. (1990)

EXAMINER

DATE CONSIDERED

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Page 10 of 24

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OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	10	Kubota, E., et al., "Interleukin 1 $\beta$ and Stromelysin (MMP3) Activity of Synovial Fluid as Possible Markers of Osteoarthritis in the Temporomandibular Joint," J. Oral Maxillofac. Surg. 55:20-27, American Association of Oral and Maxillofacial Surgery (1997)
	AS	10	Leppert, D., et al., "Matrix metalloproteinase-9 (gelatinase B) is selectively elevated in CSF during relapses and stable phases of multiple sclerosis," Brain 121:2327-2334, Oxford University Press (1998)
	AT	10	Libby, P., "The interface of atherosclerosis and thrombosis: basic mechanisms," Vasc. Med. 3:225-229, Arnold (1998)

EXAMINER	<i>[Signature]</i>	DATE CONSIDERED
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Page 11 of 24

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OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	11	Lode, H.N., et al., "Immunocytokines: A Promising Approach to Cancer Immunotherapy," <i>Pharmacol. Ther.</i> 80:277-292, Elsevier Science Inc. (1998)
	AS	11	Louis, E., et al., "Increased production of matrix metalloproteinase-3 and tissue inhibitor of metalloproteinase-1 by inflamed mucosa in inflammatory bowel disease," <i>Clin. Exp. Immunol.</i> 120:241-246, Blackwell Science (May 2000)
	AT	11	Massova, I., et al., "Structural Insights into the Catalytic Domains of Human Matrix Metalloprotease-2 and Human Matrix Metalloprotease-9: Implications for Substrate Specificities," <i>J. Mol. Model.</i> 3:17-30, Springer-Verlag (1997)

EXAMINER

DATE CONSIDERED

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Page 12 of 24

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OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	12	Masure, S., et al., "Production and characterization of recombinant active mouse gelatinase B from eukaryotic cells and <i>in vivo</i> effects after intravenous administration," <i>Eur. J. Biochem.</i> 244:21-30, Springer International (1997)
	AS	12	McKerrow, J.H., "Development of cysteine protease inhibitors as chemotherapy for parasitic diseases: insights on safety, target validation, and mechanism of action," <i>Int'l. J. Parasitol.</i> 29:833-837, Elsevier Science Ltd. (1999)
	AT	12	Miyazono, K., et al., "A role of the latent TGF- $\beta$ 1 binding protein in the assembly and secretion of TGF- $\beta$ 1," <i>EMBO J.</i> 10:1091-1101, Oxford University Press (1991)

EXAMINER

DATE CONSIDERED

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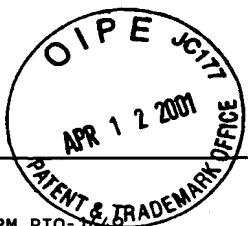
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	AR	13	Miyazono, K., et al., "Retention of the Transforming Growth Factor- $\beta$ 1 Precursor in the Golgi Complex in a Latent Endoglycosidase H-sensitive Form," <i>J. Biol. Chem.</i> 267:5668-5675, The American Society for Biochemistry and Molecular Biology, Inc. (1992)
	AS	13	Morén, A., et al., "Identification and Characterization of LTBP-2, a Novel Latent Transforming Growth Factor- $\beta$ -binding Protein," <i>J. Biol. Chem.</i> 269:32469-32478, The American Society for Biochemistry and Molecular Biology, Inc. (1994)
	AT	13	Munger, J.S., et al., "Interactions between Growth Factors and Integrins: Latent Forms of Transforming Growth Factor- $\beta$ Are Ligands for Integrin $\alpha v \beta 1$ ," <i>Molec. Biol. Cell</i> 9:2627-2638, The American Society for Cell Biology (1998)

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#### OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	14	Nagase, H., and Fields, G.B., "Human Matrix Metalloproteinase Specificity Studies Using Collagen Sequence-Based Synthetic Peptides," <i>Biopolymers (Peptide Sci.)</i> 40:399-416, Wiley-Interscience (1996)
	AS	14	Nunes, I., et al. "Latent Transforming Growth Factor-β Binding Protein Domains Involved in Activation and Transfutaminase-dependent Cross-Linking of Latent Transforming Growth Factor-β" <i>J. Cell. Biol.</i> 136:1151-1163, The Rockefeller University Press (1997)
	AT	14	Ogata, Y., et al., "Steps Involved in Activation of the Pro-matrix Metalloproteinase 9 (Progelatinase B)-Tissue Inhibitor of Metalloproteinases-1 Complex by 4-Aminophenylmercuric Acetate and Proteinases," <i>J. Biol. Chem.</i> 270:18506-18511, The American Society for Biochemistry and Molecular Biology, Inc. (1995)

EXAMINER	DATE CONSIDERED
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



Page 15 of 24

FORM PTO-1449 INFORMATION DISCLOSURE STATEMENT		ATTY. DOCKET NO. 0623.1000000	APPLICATION NO. 09/756,283
		APPLICANT Chernajovsky et al.	
		FILING DATE January 9, 2001	GROUP 1614

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	AO						Yes No
	AP						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

<i>JW</i>	AR	15	Peng, K.-W., et al., "A Gene Delivery System Activatable by Disease-Associated Matrix Metalloproteinases," <i>Hum. Gene Ther.</i> 8:729-738, Mary Ann Liebert, Inc. (1997)
<i>JW</i>	AS	15	Roberts, A.B., and Sporn, M.B., "Chapter 8. The Transforming Growth Factor- $\beta$ s," in <i>Peptide Growth Factors and Their Receptors I</i> , Sporn, M.B. and Roberts, A.B., eds., Springer-Verlag, Berlin, Germany, pp. 419-472 (1990)
<i>JW</i>	AT	15	Roth-Eichhorn, S., et al., "Subcellular Localization of (Latent) Transforming Growth Factor $\beta$ and the Latent TGF- $\beta$ Binding Protein in Rat Hepatocytes and Hepatic Stellate Cells," <i>Hepatology</i> 28:1588-1596, W.B. Saunders Co. (1998)

EXAMINER	<i>JW</i>	DATE CONSIDERED
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



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	AN						Yes No
	AO						Yes No
	AP						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	16	Saharinen, J., et al., "Identification and Characterization of a New Latent Transforming Growth Factor-β-binding Protein, LTBP-4," <i>J. Biol. Chem.</i> 273:18459-18469, The American Society for Biochemistry and Molecular Biology, Inc. (1998)
	AS	16	Saharinen, J., et al., "Latent transforming growth factor-β binding proteins (LTBPs) - structural extracellular matrix proteins for targeting TGF-β action," <i>Cytokines &amp; Growth Factor Rev.</i> 10:99-117, Elsevier Science Ltd. (1999)
	AT	16	Sanderson, N., et al., "Hepatic expression of mature transforming growth factor β1 in transgenic mice results in multiple tissue lesions," <i>Proc. Natl. Acad. Sci. USA</i> 92:2572-2576, National Academy of Sciences of the USA (1995)

EXAMINER	DATE CONSIDERED
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



Page 17 of 24

FORM PTO-1449 <b>INFORMATION DISCLOSURE STATEMENT</b>		ATTY. DOCKET NO. 0623.100000	APPLICATION NO. 09/756,283
		APPLICANT Chernajovsky et al.	
		FILING DATE January 9, 2001	GROUP 1614

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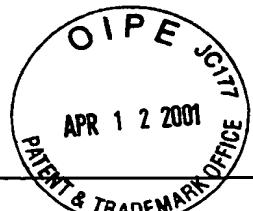
**OTHER (Including Author, Title, Date, Pertinent Pages, etc.)**

AR	17	Saharinen, J., et al., "Association of the small latent transforming growth factor-β with an eight cysteine repeat of its binding protein LTBP-1," <i>EMBO J.</i> 15:245-253, Oxford University Press (1996)
AS	17	Satoh, M., et al., "Stable production of recombinant pro-urokinase by human lymphoblastoid Namalwa KJM-1 cells: Host-cell dependency of the expressed-protein stability," <i>Cytotechnology</i> 13:79-88, Kluwer Academic Publishers (1993)
AT	17	Schultz-Cherry, S., et al., "The Type 1 Repeats of Thrombospondin 1 Activate Latent Transforming Growth Factor-β," <i>J. Biol. Chem.</i> 269:26783-26788, The American Society for Biochemistry and Molecular Biology, Inc. (1994)

EXAMINER

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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



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Page 18 of 24

FORM PTO-1449 INFORMATION DISCLOSURE STATEMENT		ATTY. DOCKET NO. 0623.100000	APPLICATION NO. 09/756,283
		APPLICANT Chernajovsky et al.	
		FILING DATE January 9, 2001	GROUP 1614

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	AO						Yes No
	AP						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

<i>AJ</i>	AR	18	Singer, I.I., et al., "Aggrecanase and metalloproteinase-specific aggrecan neo-epitopes are induced in the articular cartilage of mice with collagen II-induced arthritis," <i>Osteoarthritis and Cartilage</i> 5:407-418, WB Saunders Ltd. (1997)
	AS I	18	Tsuji, T., et al., "Molecular cloning of the large subunit of transforming growth factor type β masking protein and expression of the mRNA in various rat tissues," <i>Proc. Natl. Acad. Sci. USA</i> 87:8835-8839, National Academy of Sciences of the USA (1990)
	AT	18	ten Dijke, P., et al. "Identification of another member of the transforming growth factor type β gene family," <i>Proc. Natl. Acad. Sci. USA</i> 85:4715-4719, National Academy of Sciences of the USA (1988)

EXAMINER		DATE CONSIDERED
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



Page 19 of 24

FORM PTO-1449 <u>INFORMATION DISCLOSURE STATEMENT</u>		ATTY. DOCKET NO. 0623.1000000	APPLICATION NO. 09/756,283
		APPLICANT Chernajovsky et al.	RECEIVED U.S. PATENT AND TRADEMARK OFFICE APR 16 2001
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	AO						Yes No
	AP						Yes No

**OTHER (Including Author, Title, Date, Pertinent Pages, etc.)**

	AR	19	Tort, J., et al., "Proteinases and Associated Genes of Parasitic Helminths," <i>Adv. Parasitol.</i> 43:161-266, Academic Press (1999)
	AS	19	Triantaphyllopoulos, K.A., et al., "Cloning and expression of murine IFN $\beta$ and a TNF antagonist for gene therapy of experimental allergic encephalomyelitis," <i>Gene Ther.</i> 5:253-263, Stockton Press (1998)
	AT	19	Uhlmann, E., "Peptide Nucleic Acids (PNA) and PNA-DNA Chimeras: From High Binding Affinity towards Biological Function," <i>Biol. Chem.</i> 379:1045-1052, Walter de Gruyter (1998)

EXAMINER		DATE CONSIDERED
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



Page 20 of 24

FORM PTO-1449 INFORMATION DISCLOSURE STATEMENT		ATTY. DOCKET NO. 0623.1000000	APPLICATION NO. 09/756,285
		APPLICANT Chernajovsky et al.	
		FILING DATE January 9, 2001	GROUP 1614

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AO						Yes No
AP						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	20	Uhm, J.H., et al., "Migratory Behavior of Lymphocytes Isolated from Multiple Sclerosis Patients: Effects of Interferon $\beta$ -1b Therapy," Ann. Neurol. 46:319-324, American Neurological Association (1999)
	AS	20	van Meurs, J., et al., "Cleavage of Aggrecan at the Asn <sup>341</sup> -Phe <sup>342</sup> Site Coincides With the Initiation of Collagen Damage in Murine Antigen-Induced Arthritis," Arthritis & Rheumat. 42:2074-2084, American College of Rheumatology (1999)
	AT	20	Vodovotz, Y., et al., "Regulation of Transforming Growth Factor $\beta$ 1 by Nitric Oxide," Cancer Res. 59:2142-2148, American Association for Cancer Research (1999)

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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



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Page 21 of 24

FORM PTO-1449  <b>INFORMATION DISCLOSURE STATEMENT</b>		ATTY. DOCKET NO. 0623.100000	APPLICATION NO. 09/756,283
		APPLICANT Chernajovsky et al.	
		FILING DATE January 9, 2001	GROUP 1614

#### U.S. PATENT DOCUMENTS

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	AN						Yes No
	AO						Yes No
	AP						Yes No

#### OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	21	Voth, B.R., et al., "Differentially expressed <i>Leishmania major</i> gp63 genes encode cell surface Leishmanolysin with distinct signals for glycosylphosphatidylinositol attachment," <i>Molec. Biochem. Parasitol.</i> 93:31-41, Elsevier Science B.V. (1998)
	AS	21	Vu, T.-H., and Werb, Zena, "Matrix metalloproteinases: effectors of development and normal physiology," <i>Genes &amp; Develop.</i> 14:2123-2133, Cold Spring Harbor Laboratory Press (September 2000)
	AT	21	Wakefield, L.M., et al., "Recombinant TGF-β1 Is Synthesized as a Two-Component Latent Complex That Shares Some Structural Features with the Native Platelet Latent TGF-β1 Complex," <i>Growth Factors</i> 1:203-218, Harwood Academic Publishers GmbH (1989)

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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



Page 22 of 24

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	AO						Yes No
	AP						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	22	Wakefield, L.M., et al., "Recombinant Latent Transforming Growth Factor $\beta$ 1 Has a Longer Plasma Half-Life in Rats than Active Transforming Growth Factor $\beta$ 1, and a Different Tissue Distribution," <i>J. Clin. Invest.</i> 86:1976-1984, The Rockefeller University Press (1990)
	AS	22	Williams, L.W., et al., "Complement: function and clinical relevance," <i>Ann. Allergy</i> 60:293-302, American College of Allergy and Immunology (1988)
	AT	22	Wyman, T.B., et al., "Design, Synthesis, and Characterization of a Cationic Peptide That Binds to Nucleic Acids and Permeabilizes Bilayers," <i>Biochem.</i> 36:3008-3017, American Chemical Society (1997)

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



Page 23 of 24

FORM PTO-1449 <u>INFORMATION DISCLOSURE STATEMENT</u>		ATTY. DOCKET NO. 0623.100000	APPLICATION NO. 09/756,283
		APPLICANT Chernajovsky et al.	
		FILING DATE January 9, 2001	GROUP 1614

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	AN						Yes No
	AO						Yes No
	AP						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	23	Ye, Q.-Z., et al., "Reconstructed 19 kDa Catalytic Domain of Gelatinase A Is an Active Proteinase," <i>Biochem.</i> 34:4702-4708, American Chemical Society (1995)
	AS	23	Yin, W., et al., "Isolation of a Novel Latent Transforming Growth Factor-β Binding Protein Gene (LTBP-3)," <i>J. Biol. Chem.</i> 270:10147-10160, The American Society for Biochemistry and Molecular Biology, Inc. (1995)
	AT	23	Yoshioka, M., et al., "Effect of proteases from <i>Porphyromonas gingivalis</i> on adhesion molecules of human periodontal ligament fibroblast cells," <i>Folia Pharmacol. Jpn.</i> 110:347-355, The Japanese Pharmacological Society (1997)

EXAMINER	<i>[Signature]</i>	DATE CONSIDERED
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



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AN						Yes No
AO						Yes No
AP						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

AR	24	Young, A.R., et al., "Biochemical aspects of egg hatch in endo- and ectoparasites: potential for rational drug design," <i>Intl. J. Parasitol.</i> 29:861-867, Elsevier Science Ltd. (1999)
AS	24	Yu, Q. and Stamenkovic, I., "Cell surface-localized matrix metalloproteinase-9 proteolytically activates TGF-β and promotes tumor invasion and angiogenesis," <i>Genes &amp; Develop.</i> 14:163-176, Cold Spring Harbor Laboratory Press (January 2000)
AT f	24	Zhang, Y., et al., "Molecular Characterization of a Protease Secreted by <i>Erwinia amylovora</i> ," <i>J. Mol. Biol.</i> 289:1239-1251, Academic Press (1999)

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.